Title 33
ENVIRONMENTAL QUALITY
Part III. Air

Chapter 22. Control of Emissions of Nitrogen Oxides (NO_x)
§2201. Affected Facilities in the Baton Rouge Nonattainment Area and the Region of Influence

A. - A.3. …

B. Definitions. Unless specifically defined in this Subsection or in LAC 33:III.111 or 502, the words, terms, and abbreviations in this Chapter shall have the meanings commonly used in the field of air pollution control. For purposes of this Chapter only, the following definitions shall supersede any definitions in LAC 33:III.111 or 502.

* * *

Cap—a system for demonstrating compliance whereby an affected facility, a subset of affected sources at an affected facility, or a group of affected facilities under common control are operated to stay below a mass emission rate expressed as mass per unit of time. The allowable mass emission rate is calculated by adding the allowable emissions for each affected point source. The allowable emission is the product of the source's average hourly heat input in MMBtu/hour (not to exceed any applicable permit limitations) based on the highest consecutive 30-day period during the ozone seasons of 2000 and 2001 ~~averaging capacity~~ and the applicable factor in Paragraph D.1 of this Section.

* * *

Peaking Service—a stationary gas turbine ~~or stationary internal combustion engine~~ that is operated intermittently to produce energy. To be in peaking service, the annual electric output (MW-hour) ~~heat input or horsepower-hours~~ for the affected point source shall be less than the product of 2500 hours and the MW rating of the turbine ~~or the horsepower rating of the engine~~.

* * *

Trading Allowances—the tons of NO_x emissions that result from over-controlling, permanently reducing the operating rate of, or permanently shutting down, an affected point source located within the Baton Rouge Nonattainment Area or the Region of Influence. The allowances are determined in accordance with LAC 33:III.607.C ~~Chapter 6~~ and from the emission factors required by Subsection D of this Section for the affected point source and the enforceable emission factor assigned by the owner or operator in accordance with Subsection E of this Section. Baseline emissions shall be the lower of actual emissions or adjusted allowable emissions, as defined in LAC 33:III.605. Trading allowances will be granted only for reductions that are real, quantifiable, permanent, and federally enforceable. NO_x reductions that are used in a facility-wide averaging plan cannot ~~be~~ also be used in a trading plan.

* * *

C. - C.3. …

a. rich-burn engines with a rating of less than 300 horsepower (Hp); ~~and~~

b. lean-burn engines with a rating of less than 320~~1500~~ Hp in the Baton Rouge Nonattainment Area; and

c. lean-burn engines with a rating of less than 1500 Hp in the Region of Influence;

C.4. - 20. …

D. Emission Factors

1. The following table lists NO_x emission factors that shall apply to affected point sources located at affected facilities in the Baton Rouge Nonattainment Area or the Region of Influence~~:~~.

NO_x Emission Factors		
Category	Maximum Rated Capacity	NOx Emission Factor [a]
Electric Power Generating System Boilers:		
Coal-fired	>/= 80 MMBtu/Hour	0.21 pound/MMBtu
Number 6 Fuel Oil-fired	>/= 80 MMBtu/Hour	0.18 pound/MMBtu
All Others (gaseous or liquid)	>/= 80 MMBtu/Hour	0.10 pound/MMBtu
Industrial Boilers	>/= 80 MMBtu/Hour	0.10 pound/MMBtu
Process Heater/Furnaces:		
Ammonia Reformers	>/= 80 MMBtu/Hour	0.23 pound/MMBtu
All Others	>/= 80 MMBtu/Hour	0.08 pound/MMBtu
Stationary Gas Turbines:	~~>/= 10 MW~~	~~0.16 pound/MMBtu [b]~~
Peaking Service, Fuel Oil-fired	>/= 10 MW	0.30 pound/MMBtu
Peaking Service, Gas-fired	>/= 10 MW	0.20 pound/MMBtu
All Others	>/= 10 MW	0.16 pound/MMBtu[b]
Stationary Internal Combustion Engines:		
Lean-burn (Region of Influence)	>/= 1500 Hp	4g/Hp-hour
Lean-burn (Baton Rouge Nonattainment Area)	>/= 320 Hp	4g/Hp-hour
Rich-burn	>/= 300 Hp	2g/Hp-hour

[a] all factors are based on the higher heating value of the fuel.
[b] equivalent to 42 ppmv (15 percent O_2, dry basis) with an F factor of 8710 dscf/MMBtu.

D.2. - 2.c. …

3. For affected point sources in an electric power generating system ~~that fire gaseous or liquid fuels~~, the emission factors from Subsection D of this Section shall apply as the mass of NO_x emitted per unit of heat input (pound NO_x per MMBtu), on a 30-day rolling average basis. Alternatively, a facility may choose to comply with a ton per day or a pound per hour cap

provided that monitoring is installed, calibrated, maintained, and operated to demonstrate compliance with the cap. The cap for a facility or for multiple facilities under common control is calculated by adding the products of the factor from Paragraph D.1 of this Section and the average hourly heat input in MMBtu/hour (not to exceed any applicable permit limitations) based on the highest consecutive 30-day period during the ozone seasons of 2000 and 2001 ~~averaging capacity~~ for each affected point source as follows:

$$Cap\ \ (tpd\ ) = 0.012\ X\ \sum_{i=1}^{N} (\ R_{li}\ x\ HI_{i}) \qquad \text{Equation D-1}$$

Where:

HI_i = the average hourly heat input based on the highest consecutive 30-day period during the ozone seasons of 2000 and 2001 ~~averaging capacity~~ of each point source (MMBtu/hour)

i = each point source included in the cap

N = the total number of point sources included in the cap

R_{li} = the limit for each point source from Subsection D of this Section (pound NO_x/MMBtu)

4. For all other affected point sources~~, including those in a coal-fired electric power generating system~~, the emission factors from Subsection D of this Section shall apply as the mass of NO_x emitted per unit of heat input (pound NO_x per MMBtu), on a 30-day rolling average basis. Alternatively, a facility may choose to comply with a cap as detailed in Paragraph D.3 of this Section provided a system, approved by the department, is installed, calibrated, maintained, and operated to demonstrate compliance.

D.5. – 9. …

E. Alternative Plans

1. Facility-Wide Averaging Plan. A facility-wide averaging plan is established in this Chapter for single affected facilities and multiple affected facilities that are owned or operated by the same entity. For sources located within the Baton Rouge Nonattainment Area or ~~and~~ the Region of Influence, an owner or operator of one or more affected facilities may use the facility-wide averaging plan as an alternative means of compliance with the emission factors from Subsection D of this Section. A request for approval to use a facility-wide averaging plan, that includes the details of the plan, shall be submitted to the department either separately or with the permit application or in the optional compliance plan described in Paragraph F.7 of this Section. A facility-wide averaging plan submitted under this provision shall be approved if the department determines that it will provide emission reductions equivalent to or more than that required by the emission factors in Subsection D of this Section and the plan establishes satisfactory means for determining initial and continuous compliance, including appropriate monitoring and recordkeeping requirements. Approval of the alternative plans by the administrative authority does not necessarily indicate automatic approval by the administrator.

E.1.a. …

b. An owner or operator of an electric power generating system ~~that fires gaseous or liquid fuels and~~ that chooses to use an averaging plan shall demonstrate compliance by either of the following methods:

E.1.b.i - ii. …

c. Owners or operators of all other affected point sources~~, including those in a coal-fired electric power generating system,~~ that choose to use an averaging plan shall demonstrate compliance by either of the following methods:

i. operating such that each affected point source does not exceed its assigned individual limit in pound NO_x/MMBtu on a 30-day rolling average basis; or

ii. complying with a cap as described in Paragraph D.~~4~~3 of this Section, provided a system, approved by the department, is installed, calibrated, maintained, and operated to demonstrate compliance with the cap.

E.1.d - i. …

2. Trading Plan. Trading is established in this Chapter as an alternate means of compliance with the emission factors from Subsection D of this Section. Within the Baton Rouge Nonattainment Area and the Region of Influence, trading allowances, as defined in Subsection B of this Section, may be traded between affected facilities owned by different companies in a manner consistent with ~~accordance with the provisions of~~ LAC 33:III.617.C.3 ~~Chapter 6~~. The approval to use trading shall be requested in the permit application or in the optional compliance plan described in Paragraph F.7 of this Section. A trading plan submitted under this provision shall be approved if the department determines that it will provide NO_x emission reductions equivalent to or more than that required by the emission factors of Subsection D of this Section and the plan establishes satisfactory means for determining ongoing compliance, including appropriate monitoring and recordkeeping requirements. Approval of trading plans by the administrative authority does not necessarily indicate automatic approval of the administrator.

F. - H.3.b.vi. …

4. The owner or operator of stationary internal combustion engines that are subject to this Chapter ~~and have a horsepower rating of 300 Hp or greater for rich-burn engines or 1500 Hp or greater for lean-burn engines~~ shall demonstrate continuous compliance as follows:

H.4.a. - J.2. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 28:290 (February 2002), LR 28: